In the claims:

Please amend claims 4-7, 10, 12-13, 15-16, 19-20, 22, 24, 26, 28-29, 32-33, 35-36, and 38-39 as follows:

4. (Amended) The antibody according to [any of claims 1-3] claim 1, which is generated using a polypeptide encoded by a base sequence set out in SEQ ID NO: 1 or a fragment of said polypeptide as an antigen.

5. (Amended) The antibody according to [any of claims 1-4] claim 1 wherein the antibody is a monoclonal antibody.

6. (Amended) The antibody according to [any of claims 1-5] claim 1 wherein the antibody is generated using a fusion protein comprising a LAR phosphatase domain and another protein or a polypeptide fragment as an immunogen.

7. (Amended) The antibody according to [any of claims 1-5] claim 1 wherein the antibody is generated using a GST-LAR phosphatase domain fusion protein as an immunogen.

10. (Amended) The antibody according to [any of claims 6-9] claim 6 wherein the antibody that was generated using the fusion protein as an immunogen is screened using said fusion protein.

12. (Amended) The antibody according to [any of claims 5-11] claim 5 having a molecular weight of about 150 kDa.

13. (Amended) A hybridoma cell line that produces the antibody according to [any of claims 5-10 and 12] claim 5.

15. (Amended) A method for generating an antibody having specificity to a LAR phosphatase subunit, comprising a step of:

immunizing an animal with [wherein] a fusion protein comprising a LAR phosphatase domain and another protein or polypeptide fragment [is used as an immunogen].

16. (Amended) A method for generating an antibody having specificity to a LAR phosphatase subunit, comprising a step of:

immunizing an animal with [wherein] a GST-LAR phosphatase domain fusion protein [is used as an immunogen].

19. (Amended) The method according to [any of claims 15-18] claim 15, further comprising a step of:

screening antibodies generated in the immunizing step [wherein the antibody that was generated using the fusion protein as an immunogen is screened] using said fusion protein to identify an antibody having specificity to a LAR phosphatase subunit.

20. (Amended) A method of quantitative determination of LAR and/or LAR derived molecules comprising the step of:

determining an amount of LAR protein and/or a fragment or a polypeptide that comprises at least a LAR intracellular domain, which is contained in a test sample using the antibody according to [any of claims 1-12] claim 1.

22. (Amended) A method for quantitative determination of LAR and/or LAR derived molecules comprising the steps of:

isolating LAR and /or a fragment or a polypeptide that comprises at least a LAR intracellular domain, from a test sample using the antibody according to [any of claims 1-12] claim 1; and

measuring an activity of the isolated LAR and/or LAR derived molecules.

24. (Amended) A method for producing LAR and/or LAR derived molecules comprising the step of:

isolating LAR protein and/or a fragment or a polypeptide that comprises at least a LAR intracellular domain using the antibody according to [any of claims 1-12] claim 1.

26. (Amended) A method for identifying the presence of LAR and/or LAR derived molecules within tissue comprising the step of:

performing immunohistological examination using the antibody according to [any of claims 1-12] claim 1 to detect LAR protein and/or a fragment or a polypeptide that comprises at least a LAR intracellular domain.

28. (Amended) The antibody according to [any of claims 1-12] claim 1 having specific immunoreactivity to thyroid carcinoma cells.

29. (Amended) A method for diagnosis of thyroid carcinoma comprising the steps of:

taking a thyroid tissue specimen from a subject suspected as suffering from thyroid cancer; and

conducting diagnosis of thyroid cancer through evaluating immunoreactivity between the antibody according to claim 27 [or 28] and said tissue specimen.

32. (Amended) A composition for histological diagnosis of thyroid carcinoma comprising the antibody according to claim 27 [or 28].

33. (Amended) A DDS formulation that was targeted to thyroid carcinoma cells using the antibody according to claim 27 [or 28].

35. (Amended) The DDS formulation according to claim 33 [or 34] which is a pharmaceutical composition for diagnosis of thyroid carcinoma.